REMARKS

By this amendment, claims 1-10, 14-19, 21-25, 29-39, 43-53 and 57 are pending, in which 11-13, 26-28, 40-42, and 54-56 are canceled without prejudice or disclaimer, and claims 1, 15, 30 and 44 are currently amended. Claims 1, 15, 30 and 44 have been amended to incorporate features found in various dependent claims. Accordingly, these changes are not believed to raise new issues requiring further consideration and/or search, and it is therefore respectfully requested that the present amendment be entered under 37 C.F.R. §1.116.

The final Office Action mailed June 8, 2005 rejected claims 1-13, 15-19, 21-28, 30-42 and 44-56 as obvious under 35 U.S.C. § 103 based on *Takagi et al.* (EP 0 903 905 A2) in view of *Baras et al.* ("Fast Asymmetric Internet Over Wireless Satellite-Terrestrial Networks," November 3, 1997), and claims 14, 29, 43 and 57 as obvious under 35 U.S.C. § 103 based on *Takagi et al.* in view of *Baras et al.* and in further view of *Srinivas* (US 6,823,387).

To advance prosecution, Applicants have amended independent claims 1, 15, 30 and 44. Amended claim 1 recites "**compensating for maximum segment size mismatch between the selected connection and a connection to an end host by dynamically resizing, based on the profile, data segments** which comprise the information before forwarding the data segments to the end host." Independent claim 15 now recites "wherein **maximum segment size mismatch between the selected connection and a connection to an end host is compensated by dynamically resizing, based on the profile, data segments** which comprise the information before forwarding the data segments to the end host." Amended claim 30 recites "means for **compensating for maximum segment size mismatch between the selected connection and a connection to an end host by dynamically resizing, based on the profile, data segments** which comprise the information before forwarding the data segments to the end host." Independent claim 40, as amended, recites "**compensate for maximum segment size mismatch between the selected connection and a connection to an end host by dynamically resizing, based on the profile, data segments** which comprise the information before forwarding the data segments to the end host."

The Office Action, on page 6, states that paragraph 0006 of *Takagi et al.* discloses the feature of "dynamically resizing data segment." Applicants respectfully disagree. The cited passage, in pertinent part, states the following (*Emphasis Added*):

> This is a scheme in which "selective ack" is used for a high TCP segment loss rate, the congestion problem is handled in such a way that a re-transmission is carried out by not regarding a data loss in the radio section as the congestion, and **the asymmetry problem is handled in such a way that the maximum segment size of the TCP in the radio section is made larger**.

The above passage merely discloses that the TCP maximum segment size can be made larger. There is no mention of "**dynamically** resizing, based on the profile, data segments." It appears that the Office Action conveniently presumes that the capability to make the maximum segment size larger is performed dynamically. This technical leap is not supported by the reference.

Additionally, for a supposed disclosure of the claimed profile, the Office Action (on page 6) refers to paragraph 0004, which states the following (*Emphasis Added*):

> More specifically, when a terminal is carrying out communications, there are cases where packet transmission, there are cases where packet transmission and reception are stopped due to degradation of a quality of radio transmission path in the network, for example. In such case, **TCP attempts the re-transmission several times using time-out of a re-transmission timer, while setting a congestion window to 1 X MSS (Maximum Segment Size)**. This implies that it takes some time before the original transmission rate is fully recovered even when the packet transmission and reception become possible again.

Applicants do not understand how the above cited passage, which provides no disclosure of any profile, can be interpreted as the claimed profile. There is only a general discussion of a re-transmission timer can be set based on the MSS.

Even assuming the references of *Takagi et al.* and *Baras et al.* were properly combined based on some teaching or suggestion in the references, and assuming the modifications proposed in the Office Action were justified by additional teachings or suggestions found in the references, even the combination does not render the claimed invention obvious. Specifically, none the references taken alone, or in combination, teaches or suggests "dynamically resizing, based on the profile, data segments." Therefore, Applicants submit that the features of independent claims 1, 15, 30 and 44 are not satisfied.

The addition of *Srinivas* does not fill in the gaps of *Takagi et al.* and *Baras et al.* In particular, *Srinivas* is applied for a supposed teaching of a parameter for disabling three-way handshake spoofing.

Therefore, claims 2-10, 14, 16-19, 21-25, 29, 31-39, 43, 45-53 and 57, which depend correspondingly from amended independent claims 1, 15, 30 and 44 are allowable at least for the reasons put forth for the allowability of these independent claims. They are also allowable on their own merits. For example, dependent claims 14, 29, 43 and 57 recite "wherein the profile further includes a parameter for disabling three-way handshake spoofing." With respect to this feature, the Office Action, on page 7, refers to col. 8: 25-62. A close study of this passage reveals no such teaching. Instead, the cited passage discloses the following (*Emphasis Added*):

> Specifically, and with reference to FIG. 3, upon receipt of a client generated TCP SYN 212 requesting the establishment of a connection, the TCP/IP layer 206 acknowledges directly the TCP SYN 212 with a SYN-ACK 214 without notifying the socket layer 204. This saves processor overhead that would otherwise be required to communicate the receipt of this request to the socket layer 204 and the subsequent notification by the socket layer 204 to the application layer 202. Instead, **the TCP/IP layer 206 waits until the completion of the three-way handshake (upon receipt of the ACK 216) before notifying 218 the socket layer 204.** This also delays the notification from the socket layer 204 to the application layer 202 and the associated allocation of resources at each level and processor overhead generated thereby. **In this way, the receipt of TCP SYN packets with spoofed IP source addresses are never communicated to the socket layer 204 or application layer 202 since they will not complete the handshake procedure.** Legitimate requests will, however be communicated 218 to the socket layer 204 and to 220 the application layer 202 for servicing since the actual legitimate client will acknowledge the SYN-ACK 214 with an ACK 216. Once the socket layer 204 and application layer 202 has been notified 218, 220 of the arrival of the connection, the client request can then be serviced 222, 224 and have the TCP/IP layer 206 transmit 226 the requested resource to the client 210.
>
> To further conserve server resources and allow the server to continue to service legitimate clients that have already made connection thereto, **the TCP/IP layer 206 also delays caching route information for the client from the TCP SYN packet until the three-way handshake is completed.** This keeps the route cache from becoming crowded with route information for the spoofed TCP SYN packets, and therefore speeds the servicing of legitimate connections. This is enabled by minimizing the amount of route cache information, and therefore the amount of non-paged pool memory, that must be processed to find this information for any one legitimate connection.

At best, the above passage describes that the three-way handshake is indeed completed, but that spoofed IP addresses are never communicated to the socket layer 204 or application layer 202 since they will not complete the handshake procedure. This falls short of "wherein the profile further includes a parameter for disabling three-way handshake spoofing," as there is no parameter disclosed in *Srinivas*, much less including the parameter as part of the claimed profile. Therefore, a *prima facie* of obviousness thus has not been established. To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580

(CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Favorable consideration of this application is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (301) 601-7252 so that such issues may be resolved as expeditiously as possible. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

8-30-05

Craig L. Plastrik
Attorney for Applicants
Registration No. 41,254